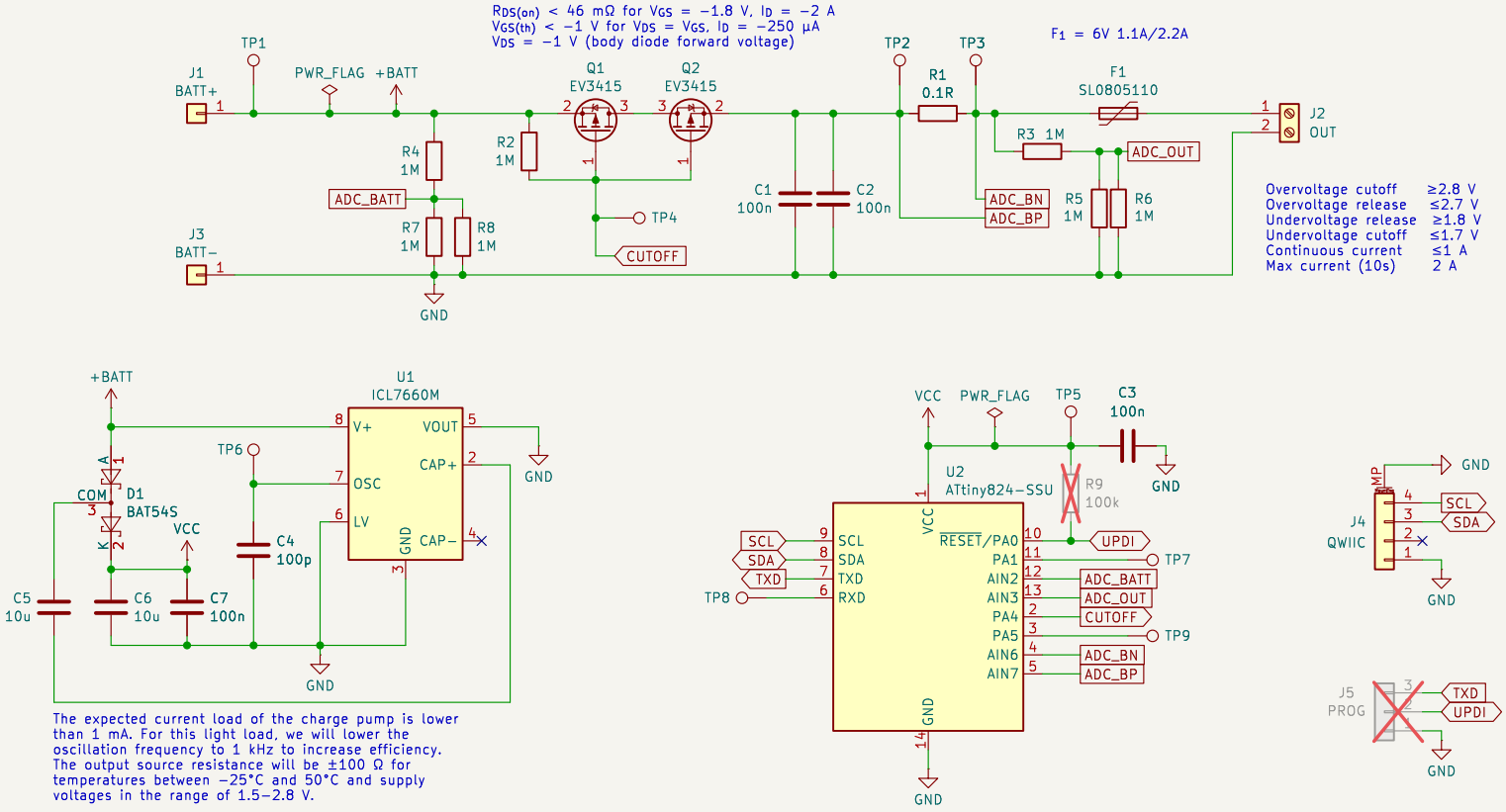

The expected current load of the charge pump is lower than 1 mA. For this light load, we will lower the oscillation frequency to 1 kHz to increase efficiency. The output source resistance will be ±100 Ω for temperatures between −25°C and 50°C and supply voltages in the range of 1.5–2.8 V.

Expected output voltage is:
V_{CC} = 2.66 V for V_{BATT} = 1.7 V
V_{CC} = 4.86 V for V_{BATT} = 2.8 V

LV = GND for V_+ < 3.5 V
LV = open for V_+ ≥ 3.5 V
C_{OSC} = 100 pF → f_{OSC} = 1 kHz
f_{OSC} = 1 kHz → η = 98% for I_{OUT} < 1 mA

Vlastimil Slinták
µArt.cz

Sheet: /
File: lto−bms.kicad_sch

Title: LTO Battery Management System

Size: A4	Date: 2024−10−04	**Rev: A**
KiCad E.D.A. 8.0.7		Id: 1/1